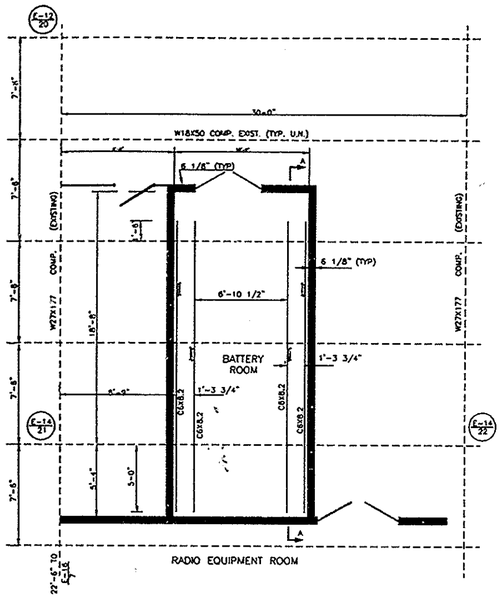
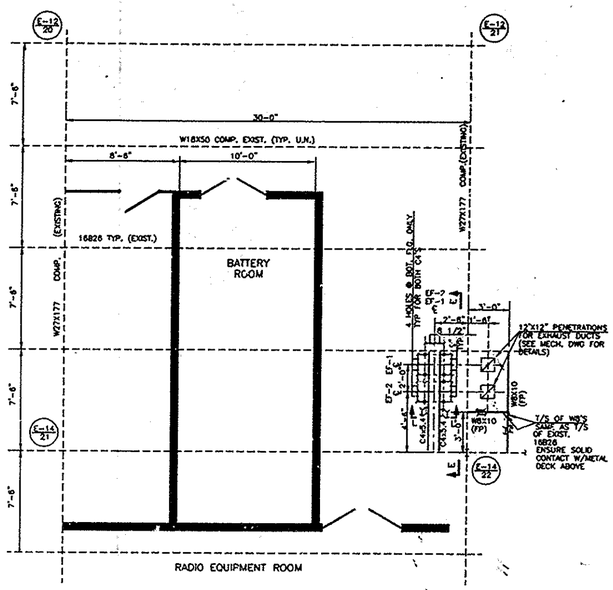


1) TOPS OF ALL C6'S SHALL BE INSTALLED ACCURATELY AT SAME ELEVATION AND SHALL BE LEVEL.
2) CLEAN EXISTING CONCRETE SURFACE THOROUGHLY BY WIRE BRUSH BEFORE PLACING GROUT.
3) PAINT ALL STRUCTURAL STEEL AS PER STEEL NOTES #11.

PARTIAL PLAN – BATTERY ROOM (9th FLOOR)

SCALE IN FEET



PARTIAL PLAN – FAN SUPPORT EF-1, EF-2 (10th FLOOR LEVEL)

SCALE IN FEET

STEEL NOTES

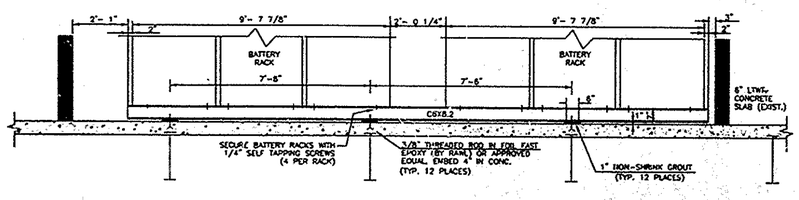
1. ALL STRUCTURAL STEEL SHAPES & PLATES SHALL BE NEW, HOT ROLLED STEEL AND CONFORM TO ASTM A-36
2. GUSSETS SHALL BE 3/8" THICK MINIMUM
3. ALL BOLTS SHALL BE 3/4" DIA ASTM A-325N HIGH STRENGTH BOLTS, WITH HEAVY DUTY NUTS & HARDENED WASHERS, UNLESS NOTED.
4. BOLT HOLE SIZE SHALL BE 1/16" LARGER THAN THE RESPECTIVE BOLT SIZE.
5. WELDING ELECTRODES SHALL OF E70XX TYPE
6. CONTRACTOR SHALL SUBMIT ERECTION & SHOP DETAIL DRAWINGS FOR APPROVAL PRIOR TO STARTING FABRICATION.
7. CONTRACTOR SHALL VERIFY ALL DIMENSIONS & ELEVATIONS PRIOR TO STARTING SHOP DETAIL DRAWINGS.
8. ALL FIELD CONNECTIONS SHALL BE BOLTED.
9. ALL CONNECTIONS INCLUDING THOSE TO EXIST. STEEL, SHALL CONFORM TO AISC DETAILING MANUAL, LATEST EDITION, USING MIN. 2 BOLTS AT EACH CONNECTION.
10. ALL WORK SHALL CONFORM TO AISC MANUAL OF STEEL CONSTRUCTION, 9th. EDITION
11. STRUCTURAL STEEL PAINTING SHALL CONFORM TO SPEC. #09910
12. PAINT SYSTEM SHALL CONFORM TO THE APPENDIX C TO THIS SPECIFICATION AND SHALL HAVE A MINIMUM THICKNESS OF 2 MIL DFT PER COAT.

CONCRETE NOTES

1. CONCRETE WORK SHALL CONFORM TO THE BUILDING CODE REQUIREMENT FOR REINFORCED CONCRETE (ACI 318-89) AND SHALL COMPLY WITH ALL LOCAL LAWS AND ORDINANCES.
2. CONCRETE SHALL BE CLASS 'D', CONFORMING TO SPEC #03300 f'c = 3000 psi.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 (fy=60 Ksi).
4. CONCRETE PROTECTION FOR REINFORCEMENT SHALL CONFORM TO ACI 318-89.
5. ALL EXPOSED CONCRETE SURFACES SHALL BE FORMED WITH PLYWOOD OR METAL IN GOOD CONDITION. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER.
6. ALL GROUT SHALL BE NON-SHRINK AND NON-METALLIC TYPE, CONFORMING TO SPEC. 03602.

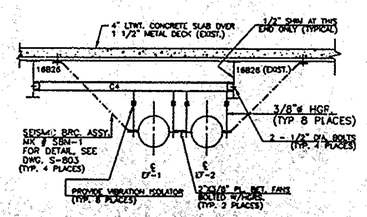
LEGEND & ABBREVIATIONS

	EXISTING STRUCTURE LINES
	WIRE MESH PARTITION
	NEW STRUCTURE LINES
	SEISMIC BRACING IN DIRECTION SHOWN.
X	SEISMIC BRACING IN BOTH DIRECTION
	SEISMIC BRACING
EF-1 & 2	EXHAUST FAN
AC-1	AIR HANDLING UNIT
ADDL.	ADDITIONAL
ASSY.	ASSEMBLY
BOT.	BOTTOM
BRC.	BRACING
COMP.	COMPOSITE BEAM
CONC.	CONCRETE
EA.	EACH
ENCLO.	ENCLOSURE
EXIST.	EXISTING
EXP.	EXPANSION
F3	LIGHTING FIXTURE
FLR.	FLOOR
FP	FIREPROOF
GA.	GAGE
HEX.	HEXAGONAL
HGR'S	HANGERS
ID	INSIDE DIAMETER
MK	MARK
OD	OUTSIDE DIAMETER
PL	PLATE
TH.	THICK
SCH.	SCHEDULE
TYP. SUP'T	TYPICAL SUPPORT
VF	VERIFY IN FIELD



SECTION A–A

SCALE IN FEET



SECTION E–E

SCALE IN FEET

Sheet 90 of 110

THE PORT AUTHORITY OF NY & NJ

ORIGINAL SIGNED & SEALED BY N.Y. P.E. (OR R.A.)

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XENON CO.
– CONSULTING ENGINEERS –
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Plainfield, New Jersey, 07060
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I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS CONSTITUTING A PART OF CONTRACT NO. WTC-945.071 IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.

DATE 1/16/98 Scott A. Adams SPEC. WRITER

DATE 4/10/98 P.C. Huang ENGINEER OF DESIGN

No.	Date	Revision	Approved

The World Trade Center

Title
STANDBY POWER
5 WORLD TRADE CENTER

COMMUNICATIONS

LEGEND, ABBREVIATIONS AND NOTES
BATTERY ROOM SUPPORT

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

A.S.	S.C	A.S.
Designed by	Drawn by	Checked by

Date — Scale AS NOTED

Contract Number: WTC-945.071 — Drawing Number: S-801